

12-1-1981

# The 1981 Iowa Corn Yield Test Report, District 2

K. E. Ziegler  
*Iowa State University*

A. R. Campbell  
*Iowa State University*

Follow this and additional works at: <http://lib.dr.iastate.edu/cornyield>



Part of the [Agriculture Commons](#), and the [Agronomy and Crop Sciences Commons](#)

---

## Recommended Citation

Ziegler, K. E. and Campbell, A. R., "The 1981 Iowa Corn Yield Test Report, District 2" (1981). *Iowa Corn Yield Tests*. 80.  
<http://lib.dr.iastate.edu/cornyield/80>

This Report is brought to you for free and open access by the Extension and Experiment Station Publications at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa Corn Yield Tests by an authorized administrator of Iowa State University Digital Repository. For more information, please contact [digirep@iastate.edu](mailto:digirep@iastate.edu).

---

# The 1981 Iowa Corn Yield Test Report, District 2

## **Abstract**

Results of the Iowa Corn Yield Test are published to aid Iowa farmers in selecting corn varieties. This is the sixty-second consecutive year for the test.

## **Disciplines**

Agriculture | Agronomy and Crop Sciences



THE 1981 IOWA CORN YIELD TEST REPORT

District 2

Results of the Iowa Corn Yield Test are published to aid Iowa farmers in selecting corn varieties. This is the sixty-second consecutive year for the test.

The presentation of data for the entries tested does not imply approval or endorsement by the authors or by the agencies sponsoring or conducting the test. Entries in tables 1 and 2 are designated by brand name and variety.

1981 Procedure

Producers of corn seed and Iowa State University were eligible to enter varieties in the Iowa Corn Yield Test. Each producer was allowed a maximum of six entries per district. All entries had to be available in a quantity of at least 10 bushels of seed.

One hundred thirty-two entries were compared in this test. Fifteen of the entries were determined to be widely grown and were entered by Iowa State University. A widely grown entry was planted on 0.54 percent or more of the corn acreage in the district according to a 1980 survey of Iowa corn growers. Iowa State University entered a maximum of three widely grown varieties of any given brand. These entries were given priority over the remaining 117 entries made by seed producers.

Each entry was replicated four times in four-row plots at a planting rate of 25,500 kernels per acre at each location. All locations were machine-planted. The center two rows of each plot were harvested with a corn combine. No gleanings or dropped ears were included in yield data. A moisture determination was made from each plot, and yields were corrected to 15.5-percent moisture for shelled corn.

How Information Is Presented

The data presented are averages of two locations in 1979 and 1980, and three locations in 1981. Yield in bushels per acre and percentage of moisture, root lodging, stalk lodging, dropped ears, and stand are shown for all entries in 1981 and for those tested in 1979 and 1980 that were in the 1981 test.

Interpretation of Results

Yield differences due to variation in soil, fertility, moisture availability, insect infestation, and diseases, plus any variation due to

*Prepared by K. E. Ziegler, instructor in agronomy, and A. R. Campbell, associate professor of agronomy and secretary of the Iowa Crop Improvement Association.*

planting and harvesting techniques, are identified through statistical analysis. The LSD values shown in tables 1 and 2 represent, in bushels per acre, the amounts of yield variation that could be due to variations in the factors just mentioned. In comparing varieties, yield differences greater than the LSD value can be attributed to genetic differences in the yield potential of these varieties; yield differences less than the LSD value are not statistically different and could have been due to other factors.

Grain moistures shown in tables 1 and 2 are indicators of maturity and natural drying rate. Maturity of varieties entered generally ranged from early to full season. Yield comparisons should be made among varieties of similar maturity.

It is important to select varieties having stable performance over a range of environmental conditions. High yields for two or more consecutive years indicate stable performance. Supplemental yield and agronomic information about specific varieties may be obtained from your seed corn dealers and from neighbors who have grown these varieties.

1981 Field Data

The District 2 test was conducted on farms operated by Clifford Branstad near Thompson in Winnebago County, Elvin Toppin near Rudd in Floyd County, and Harold Kerndt near Waukon in Allamakee County. Field data are presented in table A.

Subsoil moisture for the district was favorable to excessive at planting time. Rainfall for the district was well above normal for the growing season except for May and September at the Rudd location and May, July, and September at the Waukon location when it dropped below normal. Temperatures were near normal for the district except at the Waukon location where they were below normal for May, July, August, and September. The average district yield was 2 bushels per acre below the mean of the five preceeding years' averages.

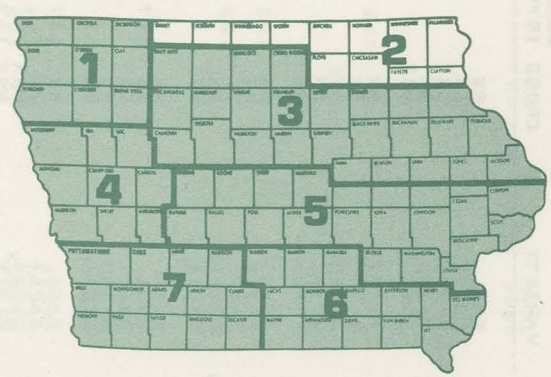




TABLE 1. AVERAGE PERFORMANCE OF VARIETIES TESTED IN DISTRICT 2.  
25,500 PLANTING RATE. LSD FOR 1981 YIELD IN BUSHELS IS 13.

BRAND	VARIETY	CROSS	YIELD BU./A			MOISTURE PCT.			ROCT LODGING PCT.			STALK LODGING PCT.			DROPPED EARS PCT.			STAND PCT.		
			1979	1980	1981	1981	1980	1979	1981	1980	1979	1981	1980	1979	1981	1980	1979	1981	1980	1979
FEDERAL	FX4	SX			100	22.5			4			5			0			80		
CORNELIUS	C21SX	SX			138	23.3			0			3			1			86		
MIGRO	HP201	SX			121	23.4			3			2			0			83		
STAUFFER	S4800	SX			133	23.8			0			2			0			78		
GOLD TAG	1064	MSX			127	23.9			0			4			1			85		
TRACY	T2001	SX			135	24.0			0			2			0			79		
RENK	RK18	SX			146	24.0			0			1			1			84		
AMES BEST	AB105	SX			131	24.1			1			4			0			81		
GOLD TAG	1090	SX			129	24.2			2			3			0			76		
FEDERAL	FX15	SX		114	113	24.3	19.1		6	9		3	8		0	1		77	82	
SOKOTA	TS60	SX			131	132	24.5	19.6	0	1		4	7		0	0		87	76	
CORNELIUS	C31SX	SX			138	136	24.6	19.6	0	6		3	9		0	1		86	81	
PIONEER	3906	SX			114	24.6			0			0			0			84		
NORTHROP KING	PX9288	SX			121	24.6			0			0			0			87		
PAYCO	SX611	SX			135	24.6			0			2			0			79		
KALTENBERG	KX55	SX			137	24.7			0			2			0			87		
*PIONEER	3901	SX	147	133	138	24.7	20.9	21.9	2	4	10	1	3	2	1	2	1	85	88	89
CARGILL	834	SX			115	24.7			1			4			0			81		
SAR	SX103	SX			142	24.8			0			3			0			82		
JACQUES	JX97	SX		134	141	24.8	19.5		0	3		3	8		1	1		87	78	
*SUPERCROST	2350	SX	147	133	136	24.9	21.5	23.5	0	1	13	2	3	6	1	1	0	83	85	90
FUNK	G4256	SX		123	119	24.9	19.7		0	6		1	7		1	2		82	84	
*FUNK	G4224	MSX			136	24.9			1			2			0			87		
FUNK	G4315	MSX	143	133	146	24.9	20.7	23.2	1	3	13	3	6	5	1	2	1	85	82	88
STAUFFER	S3306	SX			125	24.9			17			5			0			86		
USS	9520	SX			128	24.9			1			2			0			83		
GUTWEIN	2180	SX		132	148	25.0	20.0		0	1		4	8		1	2		87	80	
STAUFFER	S4402	SX			149	25.0			1			3			0			84		
MIGRO	HP277	SX			129	25.1			1			1			0			71		
MCCURDY	4664	SX		136	138	25.1	20.1		4	1		3	4		0	0		85	84	
PAG	SX181	SX		139	117	25.1	20.4		1	13		2	4		0	0		79	84	
LYNKS	LX4075	SX		141	137	25.2	19.4		3	2		1	7		0	1		78	82	
KRUGER	8101	SX			117	25.2			0			1			0			64		
USS	0525	SX			141	25.3			0			3			0			82		
O'S GOLD	6880	SX		156	158	25.4	22.0		1	0		2	3		0	1		88	89	
TROJAN	T950	SX			117	25.4			0			2			0			65		
TRACY	T205SXI	SX			126	25.5			0			3			1			72		
O'S GOLD	2330	SX			131	25.5			0			3			0			81		
SAR	SX123	SX	140	140	131	25.6	20.3	22.7	0	0	2	3	3	3	1	1	0	84	86	87
*PIONEER	3780	SX	152	138	131	25.7	20.6	22.2	0	1	1	1	6	7	0	1	0	81	82	88
BLANEY	B406	SX			133	25.7			3			7			0			86		
BLANEY	B406WX	SX			127	25.7			7			6			1			79		
CARGILL	862	SX		129	122	25.7	21.3		0	1		3	5		0	2		80	86	
FS	200	MSX			126	25.7			11			2			0			87		
MIDLAND	M1001B	SX			128	25.7			2			2			0			72		
RENK	RK24	SX			148	25.7			1			3			0			88		
DAIRYLAND	DX1007B	MSX	149	138	137	25.7	21.0	24.3	0	7	27	3	7	5	2	1	0	82	88	89
*DEKALB	XL25A	SX			136	25.7			0			0			0			89		
CORNELIUS	SX34	SX		149	147	25.8	21.6		0	1		4	3		0	0		82	86	
NORTHROP KING	PX39	SX		142	146	25.8	21.9		1	4		4	6		1	2		87	88	
DAIRYLAND	DX1008	SX		149	157	25.8	22.1		0	0		2	8		0	2		84	87	
BLANEY	B507	SX		133	134	25.8	20.2		1	12		3	6		1	1		83	86	
MIDLAND	M1051TY	SX		132	153	25.9	19.7		0	1		3	5		0	0		85	75	
PFISTER	30A	MSX		129	141	25.9	21.7		6	16		3	9		1	1		81	80	
SUPERCROST	2396	SX		140	138	25.9	21.6		0	0		3	4		1	1		85	83	
ASGROW	RX511	SX		131	135	25.9														



Table A. Field Data

Branstad Farm Clarion loam				Toppin Farm Floyd loam			Kerndt Farm Fayette silt loam		
Fertilizer applied, lbs.	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Plowdown	9	30	90	15	42	126	16	46	137
Preplant	(fall) 165	—	—	175	—	—	170	—	—
Starter	7	23	5	10	34	—	—	—	—
TOTAL	181	53	95	200	76	126	186	46	137
1980 crop	Soybeans			Soybeans			Soybeans		
Row width	30 inches			30 inches			38 inches		
Planting date	May 8 & 9			May 7 & 8			May 8		
Harvest date	Oct. 19			Oct. 20			Oct. 26 & 27		

## District 2

Designations Identifying Brands in the Yield Test

ACCO	ACCO Paymaster, Belmond, Ia. 50421
Ames Best	Ames Best Hybrids, Ames, Ia. 50010
Asgrow	Asgrow Seed Company, Kalamazoo, Mich. 49001
Blaney	Stauffer Seeds, Springfield, Ill. 62704
Cargill	Cargill, Inc., Minneapolis, Minn. 55440
Cornelius	Cornelius Seed Corn Co., Bellevue, Ia. 52031
Dairyland	Dairyland Seed Co., Inc., West Bend, Wis. 53095
*DeKalb	DeKalb AgResearch, Inc., DeKalb, Ill. 60115
Embro	Embro Seed Company, Mankato, Minn. 56001
Federal	Federal Hybrids, Marion, Ia. 52302
FS	Growmark, Inc., Bloomington, Ill. 61701
*Funk	Funk Seeds International, Inc., Bloomington, Ill. 61701
Gold Tag	Ferry-Morse Seed Co., Geneseo, Ill. 61254
GSA	Growers Seed Association, Lubbock, Tex. 79408
Gutwein	Fred Gutwein & Sons, Inc., Francesville, Ind. 47946
Jacques	Jacques Seed Company, Prescott, Wis. 54021
Kaltenberg	Kaltenberg Seed Farms, Waunakee, Wis. 53597
Kruger	Kruger Seed Company, Cedar Falls, Ia. 50613
Lyons	Lyons Hybrids, Marshalltown, Ia. 50158
McCurdy	McCurdy Seed Co., Fremont, Ia. 52561
Midland	Midland Cooperatives, Inc., Minneapolis, Minn. 55440
Migro	North American Plant Breeders, Ames, Ia. 50010
*Northrup King	Northrup King Co., Minneapolis, Minn. 55440
O's Gold	O's Gold Seed Co., Parkersburg, Ia. 50665
*PAG	PAG Seeds, Minneapolis, Minn. 55440
Payco	Payco Seeds, Inc., Dassel, Minn. 55325
Pfister	Pfister Hybrid Corn Co., El Paso, Ill. 61738
*Pioneer	Pioneer Hi-Bred International, Inc., Des Moines, Ia. 50308
*Pride	Pride Company, Inc., Glen Haven, Wis. 53810
Renk	Renk Seed Co., Sun Prairie, Wis. 53590
RO	Ottile Seed Farms, Marshalltown, Ia. 50158
Sar	Sar Hybrids, Inc., Charles City, Ia. 50616
Sokota	Sokota Hybrid Producers, Brookings, S.D. 57006
Stauffer	Stauffer Seeds, Springfield, Ill. 62704
*Super Crost	Edward J. Funk & Sons, Inc., Kentland, Ind. 47951
Tracy	Tracy & Son Farms, Inc., Janesville, Wis. 53545
*Trojan	Pfizer Genetics, Inc., Eldora, Ia. 50627
USS	USS Agri Chemicals, Atlanta, Ga. 30301

\*Companies with one or more widely grown entries made by Iowa State University.

TABLE 2. AVERAGES OF 1980-81 AND 1979-81 OF VARIETIES TESTED IN DISTRICT 2. LSD FOR YIELDS ARE 7 BUSHELS FOR 79-81 AND 9 BUSHELS FOR 80-81.

BRAND	VARIETY	CROSS	YIELD 79-81	BU./A 80-81	MOISTURE PCT. 80-81	PCT. 79-81
FEDERAL	FX15	SX	113	113	21.7	
SOKOTA	TS60	SX	131	131	22.0	
CORNELIUS	C315X	SX	137	137	22.1	
JACQUES	JX97	SX	137	137	22.1	
LYNS	LX4075	SX	139	139	22.3	
FUNK	G4256	SX	121	121	22.3	
GUTWEIN	2180	SX	140	140	22.5	
MCCURDY	4664	SX	137	137	22.6	
PAG	SX181	SX	128	128	22.7	
*PIONEER	3901	SX	139	135	22.8	22.5
MIDLAND	M1051TY	SX	142	142	22.8	
FUNK	G4315	MSX	141	139	22.8	22.9
SAR	SX123	SX	137	135	22.9	22.9
BLANEY	B507	SX	134	134	23.0	
*PIONEER	3780	SX	140	135	23.1	22.8
ASGROW	RX511	SX	133	133	23.1	
*SUPERCROST	1950	MSX	127	126	23.1	22.8
*SUPERCROST	2350	SX	138	134	23.2	23.3
FS	211	SX	131	131	23.3	
ACCO	UC2951	SX	135	135	23.3	23.4
PIONEER	3747	SX	141	137	23.3	23.2
DAIRYLAND	DX1007B	MSX	141	138	23.3	23.7
EMBR	X36	SX	139	135	23.4	23.0
*NORTHUP KING	PX37	SX	134	130	23.4	23.6
CARGILL	862	SX	125	125	23.5	
CORNELIUS	SX34	SX	148	138	23.7	
O'S GOLD	6880	SX	157	157	23.7	
SUPERCROST	2396	SX	139	139	23.7	
*PAG	SX189	SX	129	125	23.8	23.6
PFISTER	30A	MSX	135	135	23.8	
NORTHUP KING	PX39	SX	144	144	23.8	
*FUNK	G4323	MSX	139	143	23.8	24.1
*PIONEER	3732	SX	143	141	23.9	23.8
MCCURDY	46	SX	146	141	23.9	23.9
TROJAN	T1000	SX	145	145	23.9	
DAIRYLAND	DX1008	SX	153	153	23.9	
LYNS	LX4100	SX	145	138	23.9	24.0
MCCURDY	4855	SX	143	143	24.0	
BLANEY	B606	SX	146	145	24.0	24.3
PAYCO	SX788	SX	140	140	24.0	
GOLD TAG	2060	MSX	135	136	24.0	24.4
RENK	RK66	SX	146	145	24.0	24.0
GOLD TAG	2006	SX	146	146	24.0	
MIDLAND	M1101A	SX	145	133	24.1	
FS	444	SX	145	142	24.1	24.2
CORNELIUS	C465X	SX	139	137	24.1	24.1
SAR	SX200A	SX	143	143	24.1	
CARGILL	872	SX	143	142	24.2	24.4
*TROJAN	T1058	SX	132	128	24.2	24.2
AMES BEST	AB108A	SX	146	142	24.3	24.1
FEDERAL	FX6	SX	140	142	24.3	24.5
AMES BEST	SX37	SX	155	154	24.4	24.3
STAUFFER	S5602	SX	140	140	24.4	
PO	2400	SX	141	141	24.5	
DAIRYLAND	DX1007	SX	139	133	24.9	24.7
ACCO	UC4660	SX	131	131	24.9	
MIGRO	M2022X	SX	150	145	25.0	24.8
PFISTER	30	SX	141	141	25.1	
PAG	SX249	SX	140	134	25.6	25.3
STAUFFER	S5260	SX	134	134	25.7	
*PAG	SX397	SX	154	150	26.1	26.6
FS	242	SX	150	147	26.2	25.9
PAYCO	SX844	SX	131	131	27.0	
CARGILL	921	SX	139	139	28.0	

## Other Reports

Separate reports for variety performance are available for each district shown in fig. 1. These publications are available at your county extension office or from Publications Distribution, Printing and Publications Building, Iowa State University, Ames, Iowa 50011.

The 1981 Iowa Corn Yield Test Report:

- Pm-660-1-81 District 1
- Pm-660-2-81 District 2
- Pm-660-3-81 District 3
- Pm-660-4-81 District 4
- Pm-660-5-81 District 5
- Pm-660-6-81 District 6
- Pm-660-7-81 District 7

File: Agronomy 1

Cooperative Extension Service, Iowa State University of Science and Technology and the United States Department of Agriculture cooperating. Robert L. Crom, director, Ames, Iowa. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.



## and justice for all

The Iowa Cooperative Extension Service's programs and policies are consistent with pertinent federal and state laws and regulations on non-discrimination regarding race, color, national origin, religion, sex, age, and handicap.